# **EXAMINATION BULLETIN**



# ASSOCIATE OIL AND GAS ENGINEER SENIOR OIL AND GAS ENGINEER (SUPERVISOR) AGENCY CODE: 3999 CLASS CODE(S): 3783/3780 SERIES EXAMINATION CODE(S): 4CM01-01 / 4CM01-02

Department: Department of Conservation

Bulletin Release Date: April 08, 2014

Final Filing Date: April 25, 2014

Examination Type: Departmental Open

Monthly Ranged Salary: Associate Oil And Gas Engineer - \$8,115.00 to \$10,155.00

Senior Oil And Gas Engineer (Supervisor) - \$8,492.00 to \$10,634.00

Location(s): Bakersfield Sacramento Coalinga Cypress Orcutt Ventura

# INTRODUCTION

This is a **DEPARTMENTAL OPEN** examination for the Department of Conservation.

#### **EEO**

An equal opportunity employer to all regardless of age, ancestry, color, denial of family and medical care leave, disability, gender identity or expression, genetic information, marital status, medical condition, military and veteran status, national origin, political affiliation, race, religion, sex, or sexual orientation of any person.

# DRUG FREE STATEMENT

It is an objective of the State of California to achieve a drug-free state work place. Any applicant for state employment will be expected to behave in accordance with this objective because the use of illegal drugs is inconsistent with the laws of the state, the rules governing civil service and the special trust placed in public servants.

#### WHO SHOULD APPLY?

Persons who meet the minimum qualifications by the final filing date as stated on this bulletin.

# FILING INSTRUCTIONS

Final Filing Date: April 25, 2014

Examination/Employment Application (<u>STD. 678 (REV. 10/2013</u>) is available at the California Department of Human Resources' website at <a href="https://www.jobs.ca.gov">www.jobs.ca.gov</a>. Examination/Employment Application (STD. 678) may be submitted by mail or delivered in person.

By Mail:In Person:Department of ConservationDepartment

Department of Conservation
Human Resources Office
801 K Street, MS 22-13
Sacramento, CA 95814

Department of Conservation
Human Resources Office
801 K Street, 22<sup>nd</sup> Floor
Sacramento, CA 95814

**NOTE:** Only applications with original signatures will be accepted. Applications postmarked or personally delivered after the final filing date of April 25, 2014 will **not** be accepted for any reason.

Do not send your application via interoffice or interagency mail. Applications received in this manner will <u>not</u> be accepted and cannot be returned pursuant to California Code of Regulations 174.

It is the personal responsibility of each candidate to submit an examination application within the timeframe and in the manner specified on this examination bulletin.

Candidates are encouraged to contact the Human Resources Office at (916) 322-7685 to verify receipt of their application before the close-of-business on the final filing date.

# **CROSS FILING INFORMATION**

If you meet the entrance requirements for the Associate Oil and Gas Engineer and the Senior Oil and Gas Engineer (Supervisor) examination(s), you may file for one or more examination(s) on a single application. However, you must list the examination title(s) of each examination for which you wish to file.

You will only be considered for acceptance into the examination(s) that you have listed on your application.

## SPECIAL TESTING ARRANGEMENTS

If you have a disability and need special testing arrangements, mark the appropriate box on page 1 of the Examination/Employment Application (STD. 678). You will be contacted to make specific arrangements.

#### **SALARY INFORMATION**

Associate Oil And Gas Engineer - \$8,115.00 to \$10,155.00 Senior Oil And Gas Engineer (Supervisor) - \$8,492.00 to \$10,634.00

#### **ELIGIBLE LIST INFORMATION**

A departmental open eligible list will be established for the Department of Conservation. The list will be abolished 12 months after it is established unless the needs of the service and conditions of the list warrant a change in this period.

# REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

All applicants must meet the education and/or experience requirements as stated in the Minimum Qualifications section of this examination announcement by **April 25, 2014**, the final filing date. Your signature on your application indicates that you have read, understood, and possess the basic qualifications required.

Applications/resumes must include "to" and "from" dates (month/day/year), time base, job or civil service class titles (not working title), and range (if applicable) for all work experience. College course information must include title, number of semester or quarter units, name of institution, location of institution, completion dates, and degree (if applicable). Applications/resumes without this information will be rejected.

Accepted applicants are required to bring either a photo identification card or two forms of signed identification to each phase of the examination.

#### MINIMUM QUALIFICATIONS

#### All Levels:

Possession of a valid driver license of the appropriate class issued by the Department of Motor Vehicles. (Applicants who do not possess the license will be admitted into the examination but must secure the license prior to appointment.)

#### Associate Oil and Gas Engineer

Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as either "I", or "III", etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to the examination as meeting 100% of the overall experience requirement.

#### EITHER I

**Experience:** One year of experience in the California state service performing the duties of an Energy and Mineral Resources Engineer, Range C. (Applicants who have completed six months of service performing the duties of an Energy and Mineral Resources Engineer, Range C, will be admitted to the examination, but they must satisfactorily complete one year of this experience before they can be eligible for appointment.)

**Experience:** Four years of progressively responsible experience as a professional engineer or geologist in oil, gas, or geothermal resource drilling or production operations, or in the technical inspection of such operations, exploration, or development work. (A graduate degree in petroleum engineering, geology or a closely related field of engineering may be substituted for two years of required non-specialized experience.) **and** 

**Education:** Equivalent to graduation from college with major work in petroleum engineering, geology, or a closely related field. (Registration as a senior in a recognized college will admit applicants to the examination, but they must produce evidence of graduation before they can be appointed.)

#### Senior Oil and Gas Engineer (Supervisor)

Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as either "I", or "II", etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirement.

#### **EITHER I**

**Experience:** Two years of experience in California state service performing the duties of an Associate Oil and Gas Engineer.

#### OR II

**Experience:** Five years of progressively responsible experience as a professional engineer or geologist in oil, gas, or geothermal resource drilling or production operations or in the technical inspection of such operations, exploration, or development work. (A graduate degree in petroleum engineering or in geology or a closely related field of engineering may be substituted for two years of required non-specialized experience.); **and** 

**Education:** Equivalent to graduation from college with major work in petroleum engineering, geology, or a closely related field. (Registration as a senior in a recognized college will admit applicants to the examination, but they must produce evidence of graduation before they can be appointed.)

#### POSITION DESCRIPTION

The <u>Associate Oil and Gas Engineer</u> is the journey level position in the Oil and Gas Engineer class series. Incumbents independently perform assignments that require a high degree of skill in hydrocarbon or geothermal technology, difficult engineering work, including the technical evaluation of proposed oil, gas, and geothermal projects and well operations to determine possible hazards to life, health, property, and natural resources; monitor and investigate the legality and advisability of proposed operations; prepare technical and legal directives, and advise operators of preventive or corrective actions required for compliance with protection or conservation laws and sound engineering practices; prepare permits documenting technical requirements for operation; conduct complex studies of operations and reservoirs; make complex calculations, such as oil and gas reserve calculations; prepare and interpret complex technical data, maps, and statistics; write reports on investigations and studies for publication or regulatory use; may direct and review the work of other engineers and technicians in a lead capacity; may witness well tests and perform field inspections; and may make presentations on division programs before various groups.

The <u>Senior Oil and Gas Engineer (Supervisor)</u> position is the first full-supervisory level in the Oil and Gas Engineer class series. Incumbents are responsible for activities of a small district; or assist in directing activities of a larger district; or direct a major technical or administrative program of division-wide significance. Incumbents prepare technical directives for oil field operations; direct and review the work of staff and train and evaluate their performance; represent the division at administrative and legislative hearings and meetings; prepare material for administrative hearings and assist in the preparation of legal actions; prepare and review technical articles for publication.

#### **EXAMINATION INFORMATION**

This examination will consist of a qualifications appraisal interview weighted 100.00%.

The interview will include a number of predetermined job-related questions. In order to obtain a position on the eligible list, a minimum rating of 70.00% must be attained in the interview.

COMPETITORS WHO DO NOT APPEAR FOR THE INTERVIEW WILL BE DISQUALIFIED.

#### **SELECTION PLAN**

It is anticipated that interviews will be held during May/June 2014 in Sacramento, Bakersfield and Cypress, CA.

#### **SCOPE OF EXAMINATION**

In addition to evaluating the competitor's relative abilities as demonstrated by quality and breadth of experience, emphasis in the examining interview will be on measuring competitively, relative to job demands, each competitor's:

#### **KNOWLEDGE AND ABILITIES**

# **ASSOCIATE OIL AND GAS ENGINEER**

## Knowledge of:

- 1. Principles, methods, equipment, and terminology of petroleum engineering and geology.
- 2. Methods and equipment used in drilling, maintaining, and operating oil, gas, and geothermal wells.
- 3. California laws and regulations concerning the drilling, maintenance, operations, and abandonment of oil, gas, and geothermal wells.
- 4. Well operations.
- 5. Principles of effective supervision and safety practices.
- 6. The organization, policies, and objectives of the division and its operating units.
- 7. Advanced engineering technologies and trends in hydrocarbon or geothermal resources management problems in California.
- 8. Principles of research, design, and analytical techniques used in hydrocarbon and geothermal resources studies.
- 9. Principles of electronic data processing.
- 10. Principles of program planning and evaluation.
- 11. Social and economic aspects of hydrocarbon or geothermal resources development.
- 12. Principles of environmental planning and impact assessment.
- 13. Principles, practices, and trends in public policy development and evaluation.
- 14. Formal and informal aspects of the legislative and administrative regulation processes.
- 15. Federal, State, local government, and private entities involved in hydrocarbon or geothermal resource development and regulation.
- 16. Recent research projects and literature on hydrocarbon or geothermal resources.
- 17. Principles of effective written and oral communication.

# Ability to:

- 1. Reason logically and creatively in solving complicated hydrocarbon or geothermal resources problems.
- 2. Interpret and analyze scientific and engineering data.
- 3. Perceive impacts of findings and present ideas and information effectively both orally and in writing.
- Develop and utilize a variety of analytical and technological research techniques to resolve complex resource management and conservation problems.
- 5. Develop and evaluate alternatives and make recommendations.
- 6. Consult with and advise management, staff, and high-level government and industry personnel on hydrocarbon or geothermal issues, problems, and needs.
- 7. Gain and maintain the confidence and cooperation of others.
- 8. Represent the division before professional groups, at hearings, and at meetings with government and private entities.
- 9. Analyze situations accurately and take effective action.
- 10. Act as a team or conference leader/member.
- 11. Utilize interdisciplinary teams in the conduct of studies and projects.
- 12. Establish and maintain project priorities.

#### SENIOR OIL AND GAS ENGINEER (SUPERVISOR)

#### Knowledge of:

- 1. Principles, methods, equipment, and terminology of petroleum engineering and geology.
- 2. Methods and equipment used in drilling, maintaining, and operating oil, gas, and geothermal wells.
- 3. California laws and regulations concerning the drilling, maintenance, operations, and abandonment of oil, gas, and geothermal wells.
- 4. Well operations.
- 5. Principles of effective supervision and safety practices.
- 6. The organization, policies, and objectives of the division and its operating units.

- 7. Advanced engineering technologies and trends in hydrocarbon or geothermal resource management problems in California.
- 8. Principles of research, design, and analytical techniques used in hydrocarbon and geothermal resources studies.
- 9. Principles of electronic data processing.
- 10. Principles of program planning and evaluation.
- 11. Social and economic aspects of hydrocarbon or geothermal resources development.
- 12. Principles of environmental planning and impact assessment.
- 13. Principles, practices, and trends in public policy development and evaluation.
- 14. Formal and informal aspects of the legislative and administrative regulation processes.
- 15. Federal, State, and local government, and private entities involved in hydrocarbon or geothermal resource development and regulation.
- 16. Recent research projects and literature on hydrocarbon or geothermal resources.
- 17. Principles of effective written and oral communication.
- 18. Reservoir engineering, resource assessment, exploration and development technology, subsurface geology, analysis and evaluation of regulatory requirements, resource price control, resource information systems, environmental assessments, public resource management policy development and evaluation, intergovernmental resource management, special government task forces, safety and legality of proposed operations, methods of monitoring production, injection and development including estimation of reserves and efficiency of production operations.
- 19. Principles and techniques of personnel management.
- 20. Labor relations and supervision and the organization's affirmative action objectives and a manager's role in meeting those objectives.
- 21. Oil, gas, and geothermal reservoir characteristics and behavior.
- 22. Safety and legality of proposed operations.
- 23. Methods in monitoring production and development including estimation of reserves and efficiency of production operations.

#### Ability to:

- 1. Reason logically and creatively in solving complicated hydrocarbon or geothermal resources problems.
- 2. Interpret and analyze scientific and engineering data.
- 3. Perceive impacts of findings and present ideas and information effectively, both orally and in writing.
- 4. Develop and utilize a variety of analytical and technological research techniques to resolve complex resource management and conservation problems.
- 5. Develop and evaluate alternatives, and make recommendations.
- 6. Consult with and advise management, staff, and high-level government and industry personnel on hydrocarbon or geothermal issues, problems, and needs.
- 7. Gain and maintain the confidence and cooperation of others.
- 8. Represent the division before the Legislature and professional groups, at hearings, and at meetings with government and private entities.
- 9. Analyze situations accurately and take effective action.
- 10. Act as a team or conference leader.
- 11. Utilize interdisciplinary teams in the conduct of studies and projects.
- 12. Establish and maintain project priorities.
- 13. Perform difficult and specialized engineering work of the division which requires the exercise of analytical skill, creativity, and critical judgment.
- 14. Utilize technical expertise to provide consultative services and advice on the feasibility, impact, or potential of a variety of operations, projects, or proposals.
- 15. Advise top management, staff, legislative bodies, governmental entities at all levels, and industry representatives on hydrocarbon or geothermal resources or resource management programs.
- 16. Effectively plan, organize, direct, coordinate, and evaluate the work of others.
- 17. Motivate and supervise technical and professional engineers.
- 18. Apply the laws regulating oil, gas, and geothermal operations to specific proposals and form valid conclusions regarding safety and adequacy of operations.
- 19. Prepare technical directives and administrative orders to assist in proper oil field operation and good conservation policies and practices.
- 20. Act as a team or conference leader; utilize interdisciplinary teams in the conduct of studies and projects.
- 21. Establish and maintain project priorities.
- 22. Prepare, review, and edit written reports and proposals.
- 23. Effectively contribute to meeting the organization's affirmative action objectives.

#### **VETERANS PREFERENCE**

Veterans Preference will be awarded in this examination, pursuant to Government Code Section 18973.1, effective January 1, 2014, as follows: 1) any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an entrance examination, shall be ranked in the top rank of the resulting eligibility list.

#### **CAREER CREDITS**

Career credits will not be granted for this examination.

#### **CONTACT INFORMATION**

For questions concerning this exam, please contact the Department of Conservation Human Resources Office at (916) 322-7685.

For hearing impaired or deaf candidates, please call the California Relay Service at 1-800-735-2929 (From TDD phone) 1-800-735-2922 (From Voice phone)

TDD is a Telecommunications Device for the Deaf and is reachable only from phones equipped with a TDD device.

#### DISCLAIMER

Please use the following link to review the official California Department of Human Resources (CalHR) class specification for the Oil and Gas Engineer series.

#### **GENERAL INFORMATION**

Applications are available online at <a href="https://www.jobs.ca.gov">www.jobs.ca.gov</a>, <a href="https://california\_Department">California\_Department</a> of the <a href="https://email.org/mont/beauty-b

**If you meet the requirements** stated on this bulletin, you may take this examination, which is competitive. Possession of the entrance requirement does not assure a place on the eligible list. Your performance in the examination will be compared with the performance of the others who take this test, and all candidates who pass will be ranked according to their scores.

**Travel Accommodations:** Candidates are responsible for any expenses incurred when participating in all examinations administered by the Department of Conservation. (i.e., transportation, lodging, parking, etc.)

**Departmental Open Examination:** This means that anyone may apply (state and non-state employees). The eligible list will be used specifically by the Department of Conservation.

For an examination without a written feature, it is the candidate's responsibility to contact the **Department of Conservation** three weeks after the finial filing date if he/she has not received his/her notice.

If a candidate's notice of oral interview or performance test fails to reach him/her 3 days prior to their scheduled appointment due to a verified postal error, he/she will be rescheduled upon written request.

**Examination Locations:** When a written test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. However, locations of interviews or performance evaluations may be limited or extended as conditions warrant.

The Department of Conservation reserves the right to revise the examination plan to better meet the needs of the service, if the circumstances under which this examination was planned change. Such revision will be in accordance with civil service laws and rules and all competitors will be notified.

**Candidates needing special testing arrangements** due to a disability must mark the appropriate box in part 2 of their Examination/Employment Application and/or contact the testing department on this job bulletin.

**General Qualifications:** Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment, and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class.

**Eligible Lists:** Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) sub-divisional promotional, 2) departmental promotional, 3) multi-departmental promotional, 4) service-wide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four years unless otherwise stated on the bulletin.

**Veterans' Preference:** Effective January 1, 2014, in accordance with Government Code Sections 18973.1 and 18973.5, Veterans' Preference will be awarded as follows: 1.) Any veteran, widow or widower of a veteran, or spouse of a 100 percent disabled veteran, who achieves a passing score in an entrance examination, shall be ranked in the top rank of the resulting eligibility list. Any veteran who has been dishonorably discharged or released is not eligible for Veterans' Preference. 2.) An entrance examination is defined, under the law, as any open competitive examination. And 3.) Veterans' Preference is not granted once a person achieves permanent civil service status.

Veteran status is verified by the California Department of Human Resources (CalHR). Directions to apply for Veterans' Preference are on the Application for Veterans' Preference for California State Civil Service Examinations (CalHR - 1093 (01/14), which is available on the CalHR Veterans' Information page and the Department of Veterans Affairs.

Security and Confidentiality of Examination: Pursuant to Government Code Section 19860. "It is unlawful for any person: (a) Willfully by himself or in cooperation with another person to defeat, deceive, or obstruct any person with respect to his right of examination, application, or employment under this part or board rule. (b) Willfully and falsely to mark, grade, estimate, or report upon the examination or proper standing of any person examined or certified under this part or board rule, or to aid in so doing, or make any false representation concerning the same or the person examined. (c) Willfully to furnish to any person any special or secret information for the purpose of either improving or injuring the prospects or chances of any person examined, certified or to be examined or certified under this part or board rule."

Pursuant to Government Code Section 19681: "It is unlawful for any person: (a) To practice any deception or fraud with regard to his identity in connection with any examination, application, or request to be examined. (b) To obtain examination questions or other examination material except by specific authorization either before, during, or after an examination or use or purport to use any such examination questions or materials for the purpose of instructing or coaching or preparing candidates for examinations. (c) To use any unfair means to cause or attempt to cause any eligible to waive any rights obtained under this part."

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DEPARTMENT OF CONSERVATION HUMAN RESOURCES OFFICE 801 K STREET, MS 22-13 SACRAMENTO, CA 95814 (916) 322-7685